REMARKS

Claims 20-36 remain pending in this application. Claims 28-30, 33, 35 and 36 have been amended hereby to correct matters of form. No new matter has been presented. For the reasons set forth below, Applicant respectfully submits that all claims pending in this application are in condition for allowance.

In the Office Action,

- Claims 20, 28 and 36 were rejected under 35 U.S.C. §112, second paragraph;
- Claim 36 was rejected under 35 U.S.C. §101;
- Claims 20, 23-24, 28, 31-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over non-patent literature reference (NPL) "An Efficient Adaptive Circular Viterbi Algorithm for Decoding Generalized Tailbiting Convolutional Codes", Richard V. Cox and Carl-Erik W. Sundberg, IEEE Transactions on Vehicular Technology, 1994 (hereinafter, "Sundberg") in view of Xu (U.S. Patent No. 6,829,313);
- Claims 25-27 and 33-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sundberg in view of Xu and Ramesh et al. (US 6,917,629, "Ramesh"); and
- Claims 21-22 and 29-30 were rejected under 35 U.S.C. §103(a) as being unpatentable over Sundberg in view of Xu and Kuwazoe (US 2002/0051505).

These grounds of rejection are respectfully traversed.

§112 Rejection

It is well settled that an Applicant can be his own lexicographer (MPEP §706.03(d)). In the present Office Action, the Examiner alleges that it "is not clear as to what exactly is meant by "candidate formats'" and "the specification does not provide proper clarification as to how 'candidate formats' are defined." Applicant directs the Examiner's attention to paragraphs [0010] and [0011] of the published version of the present application (US 2006/0146963) in which it is clearly explained that the "candidate format" in one embodiment "comprises a data part and a

checksum." Thus, it is respectfully submitted that those skilled in the art would have a clear understanding of what is meant by the recited term "candidate formats."

Further, as set forth above, independent claim 28 (along with several of its dependent claims) has been amended to remove the "adapted to" language that the Examiner highlighted as possibly confusing.

Reconsideration and withdrawal of the §112 rejection are accordingly respectfully requested.

§101 Rejection

At the suggestion of the Examiner, Applicant has amended claim 36 to recite a computer readable medium that stores program code. Formulated in this manner, claim 36 clearly falls within a patentable statutory class. Withdrawal of the §101 rejection is accordingly respectfully requested.

§103 Rejections

The Examiner now relies on a combination of Sundberg and Xu to allege that the claimed invention as recited in independent claims 20 and 28 is obvious.

Xu presents a decoding technique using a windowing approach where the size of the overlap between the different windows is adapted to the signal conditions (i.e., the size of the overlap is reduced in good signal conditions, thereby reducing the number of extra computations due to the overlap processing).

This is made very clear in the description of Xu. For example, column 2, lines 46 to 50 state:

> The present invention improves the sliding window technique of turbo decoding by shrinking successive learning periods needed for reliable computation as iteration proceeds through windows in a block of code.

This is very different from the goal of embodiments of the present invention, namely the identification of the transmission format from a set of possible candidates.

Thus, as a preliminary matter, Applicant submits that it is improper for the Examiner to rely on Xu, at all, as relevant prior art against the present application (even combined with other documents) as a person skilled in the art would never have naturally thought of using Xu in order to resolve the problem addressed by the present application (i.e., the two problems -- that of Xu and that of the present invention -- are sufficiently different that it is very unlikely that the person skilled in the art would make the connection between the two).

In any event, and to specific points raised in the Office Action, Xu fails to disclose what the Examiner alleges the reference to disclose. Reference is made, generally, to independent claim 20, but the arguments below are equally applicable to each of the independent claims pending herein.

The Examiner cites to column 15, line 60 – column 16, line 22 of Xu as analogous to the claimed limitation of "using a Viterbi algorithm to determine trellis metrics for a point in said signal that would be an end point of a candidate block according to the given candidate format" and "decoding a part of said signal ending at said point." However, column 15, line 60 – column 16, line 22 of Xu mainly focus on determining state metrics at each stage in the window and merely mentions in one sentence "decoding a portion of the trellis using…".

Regardless of whether the Examiner's reliance on this portion of Xu salient, that portion still does not take into account a significant component of the claimed limitations, namely that the Viterbi algorithm is being used to determine trellis metrics "… according to the given candidate format." Xu does not take this aspect of the invention into account at all.

Further, the Examiner cites to column 16, lines 22-39 of Xu as allegedly disclosing the claimed requirement of "determining from said metrics the likelihood of occupation at said point of an end state of an encoding scheme used to create the encoded signal."

However, column 16, lines 22-39 of Xu is related to determining the quality of the signal and adjusting a learning period according to the quality of the signal. As such, this passage of Xu discloses nothing about "an end state of an encoding scheme."

Further still, the Examiner cites to column 16, lines 40-57 of Xu as analogous to the claimed requirement of "performing a check using said decoded part to determine whether the candidate block satisfies an error protection scheme of the given candidate format."

Column 16, lines 40-57 of Xu, however, relates to sliding a window once it is completely decoded. It is respectfully submitted that there is no relation between the step of "performing a check using said decoded part to determine whether the candidate block satisfies an error protection scheme of the given candidate format" and the step of "sliding a window" disclosed by Xu.

Since Xu fails to overcome the admitted deficiencies of Sundberg, and the other prior art of record also fails to cure those deficiencies, Applicant respectfully submits that the presently claimed invention is allowable over any combination of Sundberg and Xu. Withdrawal of the §103(a) rejections of the claims is accordingly respectfully requested.

In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone Applicant's undersigned representative at the number listed below.

Dated: July 17, 2009

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